

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Amendment of Parts 1, 2, 22, 24, 27, 90 and	)	WT Docket No. 10-4
95 of the Commission's Rules to Improve	)	
Wireless Coverage Through the Use of Signal	)	
Boosters	)	

**REPLY COMMENTS OF NEXTIVITY, INC.**

Nextivity, Inc. ("Nextivity"), by its undersigned counsel, hereby submits these brief reply comments in response to the Second Further Notice of Proposed Rulemaking ("Second FNPRM") in the above-captioned proceeding.<sup>1</sup> Comments in this proceeding demonstrate widespread support for the expansion of signal boosters to extend carrier networks, often in rural or hard to reach areas.<sup>2</sup> Nextivity shares the view that signal booster technologies offer significant benefits to consumers, businesses and carriers. In order to make these benefits available to the public as quickly as possible, Nextivity urges the Commission not to delay and to proceed to address booster proposals that can be adopted expeditiously without the need to examine further complex interference or other issues and separately consider other booster proposals which may present more challenging issues and which may require more time, input, and analysis from the Commission and outside parties.

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<sup>1</sup> *Amendment of Parts 1, 2, 22, 24, 27, 90, and 95 of the Commission's Rules to Improve Wireless Coverage Through the Use of Signal Boosters*, WT Docket No. 10-4, Second Report and Order and Second Further Notice of Proposed Rulemaking, FCC 18-35 (rel. Mar. 23, 2018) (*Second FNPRM*).

<sup>22</sup> *See, e.g.*, WT Docket No. 10-4, Comments of T-Mobile USA, Inc. at 2 ("T-Mobile Comments"); Comments of the Enterprise Wireless Alliance; Comments of Surecall; Comments of the Ad Hoc Telecommunications Users Committee, WT Docket No. 10-4 (filed May 18, 2018).

## **1. Existing Signal Booster Rules Adequately Address Concerns Regarding Deployment of Provider-Specific Signal Boosters**

The existing Part 20 Consumer Signal Booster framework provides necessary safeguards to allow for harmonious operation of provider-specific signal boosters in the 600 MHz (617-652 MHz and 663-698 MHz), WCS (2305-2320 MHz), and BRS/EBS (2495-2690 MHz) bands.<sup>3</sup> The 600 MHz and WCS (Blocks A and B) bands are expected to extend carrier networks, in some cases, to serve consumers and non-licensee users in rural and hard to reach areas which typically are served by less infrastructure and often where users experience weaker signals.<sup>4</sup> As discussed in Nextivity's comments in this proceeding, coordination required between signal booster manufacturers and providers ensures that the provider-specific devices will not cause interference within the providers' networks and the technical parameters for signal boosters set forth in the Commission's rules will guard against interference outside of the designated band.<sup>5</sup>

To be sure, Nextivity agrees with AT&T that a delicate balance exists in the WCS band between the needs of the mobile services and that of sensitive satellite and aeronautical services.<sup>6</sup> However, the current rule framework in place for provider-specific signal boosters adequately addresses any interference issues that may cause concerns. Specifically, provider-

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<sup>3</sup> Nextivity believes that more technical input and analysis may be needed before authorizing the use of Wideband Signal Boosters in the BRS/EBS band, given the unpaired nature of this band. *See* Comments of Nextivity, Inc., WT Docket No. 10-4, at 3-4 (filed May 18, 2018) ("Nextivity Comments").

<sup>4</sup> *See, e.g.*, T-Mobile, T-Mobile Ready To Rock New Spectrum With First 600 MHz LTE Smartphone & 5G-Ready Network Gear (Aug. 31, 2017), <https://newsroom.t-mobile.com/news-and-blogs/tmobile-600mhz.htm> ("T-Mobile plans to continue deploying LTE on 600 MHz at a record-shattering pace, starting in rural America and markets across more than 1.2 million square miles where the spectrum will be clear this year."); Phil Goldstein, AT&T Begins Deploying 2.3 GHz WCS Spectrum for LTE (Sept. 9, 2015), <https://www.fiercewireless.com/wireless/at-t-begins-deploying-2-3-ghz-wcs-spectrum-for-lte> (discussing AT&T deployment of WCS spectrum for LTE service).

<sup>5</sup> *See* Nextivity Comments at 5.

<sup>6</sup> *See* Comments of AT&T Services, Inc., WT Docket No. 10-4, at 3-4 (filed May 18, 2018).

specific signal boosters must validate the PLMN-ID of an operator prior to boosting any signal.<sup>7</sup> Therefore, in areas where, for example, an AT&T signal is not present due to a spectrum sharing arrangement between AT&T and adjacent channel user, as a practical matter no provider-specific signal booster would be able to operate. In addition, a consumer signal booster “can only be certificated and operated if it complies with all applicable rules in this subpart and all applicable technical rules for the frequency band(s) of operation,”<sup>8</sup> which include important Part 27 emission requirements.<sup>9</sup> Moreover, provider-specific signal boosters only boost the signal of the specific CMRS provider for which they are designed and must also meet stringent out of band filtering requirements.<sup>10</sup>

With respect to the 600 MHz band, Nextivity applauds the rapid progress T-Mobile has made to bring high speed LTE services to millions more consumers. Nextivity is sensitive to the spectrum repacking challenges T-Mobile faces with the 600 MHz roll-out and agrees with T-Mobile that no action by the Commission should jeopardize this process as it would ultimately be detrimental to consumers.<sup>11</sup> Given that a CMRS provider’s consent is required for FCC certification of a provider-specific signal booster, Nextivity urges the Commission to authorize deployment of provider-specific signal boosters in the 600 MHz band without further delay. The protections already in place under the existing framework and discussed above in the context of

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<sup>7</sup>See *KDB 935210 D04 Provider Specific Booster Measurements v02r01 §7.1.2*, available at [https://apps.fcc.gov/kdb/GetAttachment.html?id=hkXXLf0Absln%2BoU%2BEKRfzQ%3D%3D&desc=935210%20D04%20Signal%20Booster%20Provider%20Specific%20v02r01&tracking\\_number=20673](https://apps.fcc.gov/kdb/GetAttachment.html?id=hkXXLf0Absln%2BoU%2BEKRfzQ%3D%3D&desc=935210%20D04%20Signal%20Booster%20Provider%20Specific%20v02r01&tracking_number=20673).

<sup>8</sup> 47 C.F.R. § 20.21(e)(2)(i).

<sup>9</sup> 47 C.F.R. § 27.53.

<sup>10</sup> See 47 C.F.R. § 20.21 (e)(9)(i)(E).

<sup>11</sup> See T-Mobile Comments at 3 (filed May 18, 2018).

the WCS band apply equally to allow the effective and safe roll-out of provider-specific signal boosters in the 600 MHz band.

**2. Separate Consideration and Prompt Authorization of Provider Specific Signal Booster Operations in the WCS and 600 MHz Bands Presents Minimal Risk of Interference and Would Serve the Public Interest**

The Commission's record regarding operation of provider specific signal boosters is well developed and the risk of in-band or adjacent-band interference is minimal.<sup>12</sup> In the interest of furthering the Commission's goal of improving Americans' access to wireless service without compromising other existing networks or operations,<sup>13</sup> the Commission should consider issues in this proceeding that can be resolved expeditiously, such as the expanded use of provider specific signal boosters, separately from more complex interference questions raised by, for example, new uses of wideband signal boosters or operations in the BRS/EBS band. This approach would give the Commission and outside parties adequate opportunity for discussion and technical analysis necessary to reach a reasoned conclusion on the record while enabling the public to benefit from other booster proposals and applications without undue delay.

Respectfully submitted,

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<sup>12</sup> See *Second FNPRM* at ¶ 8.

<sup>13</sup> See *Second FNPRM* at ¶ 34.